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SCHEDULE OF MEETINGS

3-8 March **Expert Committee on Trachoma, first session, Geneva**

Included on the agenda of this session are the chemotherapy of trachoma, methods of control of trachoma and acute conjunctivitis applicable in underdeveloped territories, prophylaxis of trachoma in international traffic, and international co-ordination of scientific research on trachoma.

14-30 March **International Symposium on Yaws Control, Bangkok**

WHO, in collaboration with the Government of Thailand, is sponsoring a symposium which is bringing together experts on yaws control from all parts of the world.

18-26 March **Ad Hoc Committee on Reservations to WHO Regulations No. 2 (International Sanitary Regulations), Geneva**

This committee is being convened at the request of the Executive Board to consider reservations submitted by Member States to the International Sanitary Regulations. The committee's report is to be sent to all Member States as soon as possible after the close of the meeting and is to be presented to the Fifth World Health Assembly.

24 March-5 April **Working Conference on Nursing Education, Geneva**

Specialists on various aspects of nursing education are meeting, under the auspices of WHO, to discuss relevant problems. For further information concerning this conference, see page 82.

9-11 April **Joint Committee on Health Policy, UNICEF/WHO, New York**

23-30 April **Expert Committee on the International Pharmacopoeia, tenth session, Geneva**

1-2 May **Expert Committee on the International Pharmacopoeia, Subcommittee on Non-Proprietary Names, fourth session, Geneva**

5-24 May **Fifth World Health Assembly, Geneva**

29 May-7 June **Executive Board, tenth session, Geneva**

WHO FELLOWSHIP PROGRAMME

1951 was the fifth year in which the WHO fellowship programme aided governments by providing opportunities for study abroad for selected personnel. During the year, 665 fellowships were awarded to candidates from 74 countries; 511 of these awards were financed by WHO, the remainder being administered by the Organization but paid for by other sources.

Like other Organizational activities, the fellowship programme is following a trend towards decentralization and regionalization : 66% of the 1951 WHO awards were intra-regional. This trend is also reflected in the subjects selected for study, these being determined by the needs of individual countries as expressed by regional offices or by governments. A partial list of the subjects for which fellowships were granted last year follows :

Subject	*Number*
Public-health administration and related subjects . . .	72
Control of tuberculosis, venereal diseases, and malaria	101
Sanitation	50
Maternal and child health, paediatrics	48
Nursing	28

Other awards were made for studies in rehabilitation of the handicapped, health statistics, and industrial and occupational health, as well as in clinical and medical sciences and education.

An increasingly large number of fellowships are being granted for group-training courses, seminars, symposia, etc., many of them sponsored by WHO. Of the 1951 awards, 41% were of this nature.

Bases of Awards

WHO fellowships are available to (1) Member States and Associate Members of WHO, (2) trust and other territories for whose international relations WHO Member States are responsible, and (3) territories administered by international authorities established by the United Nations. They are intended to provide opportunities for training which it is not possible to secure in the countries of the candidates for fellowships, to be an integral and essential part of a project or programme planned by a government, and to assist in strengthening health services and thereby to raise the general level of health within a country. They are usually awarded for not more than one year nor for less than six months, except in the case of special short-term fellowships of 30 days' duration for participation in group-training courses sponsored by WHO.

An application for a fellowship should be submitted directly to the candidate's government. Applicants for short-term fellowships are generally

nominated by their national health-administrations, the request being sent to the director of the WHO regional office of the region in which the candidate's country is situated.

Qualifications of Candidates

Candidates for fellowships should meet the following qualifications :

1. They must have not less than two years' experience in the subject they wish to study.

2. They must have exhausted the opportunities available in their own country for study of that subject.

3. They must choose for study a subject directly connected with the health programme of their country, preference being given to applicants for training which is necessary for a specific project.

4. They must undertake, in writing, to continue in, or enter the service of, their national health-administration—or a technical institution approved by it—for at least the first three years after their fellowship.

5. Normally, they should not be over 55 years of age where the retiring age is 60 or above, nor over 50 where the retiring age is below 60.

6. They must be able to speak, read, and write the language of the country in which they propose to study.

Reports Required

Fellows are required to submit certain reports to WHO during, and after, their period of study : a monthly report, describing the activities of the month and listing the institutions visited and the principal teachers under whom work was done; a final report, upon completion of the fellowship, giving a comprehensive account of the studies and an evaluation of what was learned, in relation to its possible application to future work; and semi-annual reports, to be submitted for two years after the fellowship ends, describing the Fellow's duties in his post and telling how he is able to apply what he learned during his study period. Governments are also requested to report, two years after completion of each fellowship, on how the Fellow has been employed since his return, how he has contributed to the national health-programme, and what further use the government intends to make of his services.

Publications by Fellows

WHO has the first right to publication of any paper which a Fellow writes on work done during his fellowship. A paper which is not considered

suitable for publication in one of the Organization's periodicals is returned to the Fellow, who may then submit it to other journals, provided he states that the work was done under a WHO fellowship but that the observations made, and the opinions expressed, are not necessarily those of the Organization.

Information Booklet Available

To meet the need for a ready source of information concerning its fellowship programme, WHO has recently published a pocket-size booklet for the use of governments and prospective Fellows.[1] Included in this booklet are details concerning the purpose and objectives of the programme, the award and duration of fellowships, selection of candidates and required assurances, travel arrangements, payment of stipend, publications by Fellows, reports, fellowships financed by other sources (UNICEF, TAED, etc.), and forms for application.

[1] World Health Organization (1952) *The fellowship programme of the World Health Organization : an information booklet*, Geneva. Published in English and in French.

KWASHIORKOR IN AFRICA

In late 1950, FAO and WHO sponsored a survey in Africa of a nutritional disorder known as kwashiorkor. This investigation, which had been recommended by the Joint FAO/WHO Expert Committee on Nutrition, was undertaken by Dr. J. F. Brock,[1] WHO consultant in nutrition, and Dr. M. Autret,[2] acting for FAO. Their two-month tour took them to Kenya, Uganda, Ruanda Urundi, Belgian Congo, French Equatorial Africa (Middle Congo), Nigeria, the Gold Coast, Liberia, the Gambia, and French West Africa (Senegal). The report on their inquiry is now available in the WHO Monograph Series.[3]

What Is Kwashiorkor ?

The term " kwashiorkor " is etymologically linked with the concept of dyspigmentation of the hair or skin, its origin being a language of the Gold Coast Colony, in which it means " red boy ". Dr. Brock and

[1] Professor of the Practice of Medicine, University of Cape Town, Union of South Africa

[2] Chief, Area and Field Branch, Nutrition Division, Food and Agriculture Organization

[3] Brock, J. F. & Autret, M. (1952) *Kwashiorkor in Africa*, Geneva (*World Health Organization : Monograph Series*, No. 8), 78 pages, price : 5/–, $1.00, or Sw. fr. 4.–. Available in English and in French. A Spanish edition has been published by FAO : *El Kwashiorkor en Africa*, Rome (*FAO – Estudios de Nutrición*, No. 8), 73 pages, price $0.75, and is on sale only through FAO sales agents.

Dr. Autret, while recognizing that kwashiorkor cannot yet be accurately defined, offer the following tentative definition :

" A nutritional syndrome (or syndromes) found among indigenous Africans in which characteristically there occurs :

(*a*) retarded growth in the late breast-feeding, weaning, and post-weaning ages, with

(*b*) alterations in skin and hair pigmentation,

(*c*) oedema,

(*d*) fatty infiltration, cellular necrosis, or fibrosis of the liver,

(*e*) a heavy mortality in the absence of proper dietary treatment, and

(*f*) the frequent association of a variety of dermatoses."

Any clinical syndrome which includes the first five of these characteristics and occurs in Africa can undoubtedly be called kwashiorkor. A similar syndrome occurring in other parts of the world might reasonably be termed kwashiorkor. It seems to merge into other nutritional syndromes, such as marasmus and Mehlnährschaden.

Other clinical features which are frequent, if not fundamental, in kwashiorkor include :

(1) gastro-intestinal disorders, such as anorexia, digestive upset, diarrhoea, and mild steatorrhea ;

(2) peevishness and mental apathy ;

(3) mild normocytic or slightly macrocytic anaemia, becoming more severe when the syndrome is complicated by parasitic infestation ;

(4) atrophy of the acini of the pancreas, resulting in decline in the enzymatic activity of the duodenal contents.

Etiology

The authors made as detailed a study as possible, in the time allotted, of the nutrition of African children and the various factors which influence it. They summarize their findings thus :

" African mothers do not receive a special supplement to the diet during pregnancy and lactation. The birth-weight of African infants is, in general, below that of European infants. Breast feeding allows the infant to grow fairly normally during the first few months of life. When breast feeding becomes insufficient, which often happens before the fourth and sixth months, the infant's diet is supplemented by gruels of cassava, bananas, maize, sweet potatoes, millet, or rice, all essentially foods rich in carbohydrate and poor in proteins, vitamins, and mineral salts. This practice is continued and extended during the period of weaning. The infant is hardly ever given animal milk at this period. On exceptional occasions it may receive a little meat or small amounts of fish. Fruits (mango, papaya, oranges, etc.) may be included in the diet from time to time when in season, and the same may be said of green vegetables, which are usually given in soup. The infant partakes of stews containing different ingredients, including chillies, which are likely to do it more harm than good. Towards the age of two or three years, the young child receives the ordinary adult diet which is, in general, better than the gruels

which before this were its chief food. While its diet remains unsatisfactory in quality and sometimes in quantity, the soup and the inevitable stew which it consumes contain, in small quantities, vegetables and a variety of other foods, such as beans and peanuts, fish fairly frequently, and sometimes meat. But for a long time the child may be unable to compete with its elders in securing an adequate share of food from the family dish, and in obtaining the quantities of protein needed for growth. It is only when it reaches the age of seven or eight years that its increasing status in the family and its activities outside the home (which enable it to obtain additional foods, such as grubs, etc.) make it possible for its nutritional needs to be more adequately covered."

FIG. 1. KWASHIORKOR IN AFRICA - I

Group of kwashiorkor cases showing typical symptoms : oedema, pot-belly, miserable expression, altered hair texture (second child from left), and dyspigmented hair (child on extreme left)

Although the present state of knowledge concerning kwashiorkor makes it difficult to establish a precise relationship between this syndrome and nutritional deficiencies, observations of dietary practices and incidence of the disorder seem to indicate that the primary factor is lack of protein. The most obvious protein factors to be considered are certain of the amino-acids, particularly methionine. However, the diets of Africans are markedly deficient in many nutrients; and factors such as vitamin B_{12}, vitamin E, and pantothenic acid need to be taken into account as contributory factors in certain features of the syndromes—e.g., pantothenic-acid deficiencies might be considered in relation to the dyspigmentation of the hair, at least in one of its varieties.

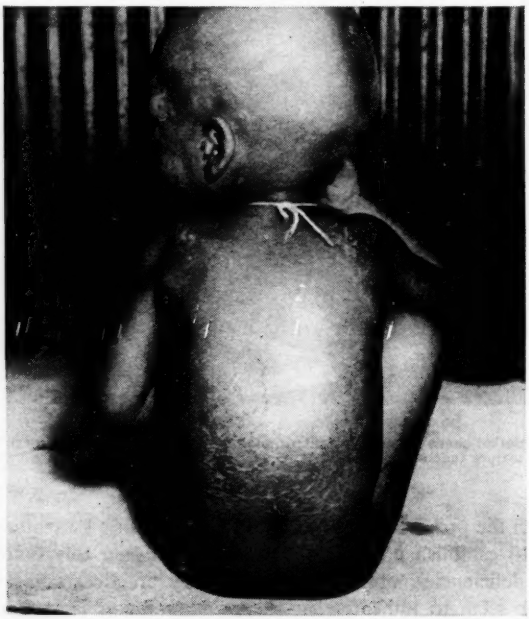
Opinions vary as to the role of parasitic diseases in the clinical manifestations of kwashiorkor, but the authors conclude that " whereas tropical parasites are probably always contributory to the etiology of kwashiorkor

in the area surveyed and may sometimes play an important part, it is likely that the dietary factor is always dominant ".

Treatment

Treatment of kwashiorkor is based on two simple principles : treatment of any infection which may be present, and giving large amounts of skim milk and an adequate and varied diet, the last to be introduced gradually

FIG. 2. KWASHIORKOR IN AFRICA - II



Dermatosis of back associated with kwashiorkor

after the first two or three weeks of treatment with milk protein. In very severe cases, it may be helpful in the first few days of treatment to administer human plasma, either intravenously, at a slow rate, into the bone-marrow, or subcutaneously in doses of 100 ml daily for ten consecutive days.

The authors recommend that the attention of governments be drawn to the efficacy of skim milk in the treatment of kwashiorkor in its early stage, and that skim-milk powder be made available to hospitals and maternity

and child-welfare centres in regions in which kwashiorkor is prevalent, through UNICEF assistance, if necessary.

Prevention

Specific measures are suggested for preventing kwashiorkor, these measures aiming at general improvement of the nutrition of Africans :

1. Production of foods which prevent kwashiorkor should be increased. Fish is particularly important since its production can be expanded more rapidly than that of milk and meat. Pulse and vegetables should be cultivated and steps taken to encourage consumption of ground-nuts. With regard to vegetables, attention should be paid to the yield of protein per unit area as well as to the yield of calories. Cereals, particularly millet and sorghum, should be grown wherever possible in preference to manioc. Village cultivation of the needed foods should be expanded.

2. Provision should be made to relieve shortages of food in the " hungry months " through suitably storing reserve stocks of food, both by families and by communities.

3. Efforts should be made to educate mothers to improve the feeding of children, especially during the weaning period.

Consideration might be given to the possibility of attacking kwashiorkor through the " demonstration area " technique, selecting a suitable area in which the condition is prevalent and attempting to introduce and develop preventive measures. Such a project might be undertaken jointly by FAO and WHO through the Technical Assistance Programme of the United Nations.

Research

The problem of kwashiorkor offers many opportunities for clinical and biochemical research. Among the subjects which should be investigated are : the etiology of the dermatoses associated with kwashiorkor; the effect of different amino-acids and other factors such as vitamin B_{12} in the treatment of the disorder; the value of pulse and vegetables in preventing kwashiorkor and the best methods of cooking and preparing kwashiorkor-preventing foods, such as " milk substitutes " from ground-nuts; anthropological and social investigations on the weaning and feeding customs in Africa; and quantitative and qualitative studies of the breast milk of African mothers at different stages of lactation and under different maternal diets. Dr. Brock and Dr. Autret suggest that FAO and WHO should stimulate and co-ordinate such research in Africa and in other parts of the world in which kwashiorkor is prevalent.

Reports of Expert Groups

MATERNITY CARE

Experience has shown that, in order to succeed, any programme of maternity care must be planned in relation to other aspects of curative and preventive medicine. It is impossible, however, to lay down a detailed plan which would be applicable to all countries. Certain standards of care are recommended in the first report of the Expert Committee on Maternity Care, which will be published on 10 June 1952 as No. 51 in the *World Health Organization : Technical Report Series*.[1] The committee recognizes that, while some specific recommendations will apply to all areas of the world, others must differ according to whether they are applied to the economically more-developed areas or to the areas economically less-developed, with different cultural patterns and a strong community life.

Definition

The committee emphasizes that child-bearing is essentially a physiological process and defines maternity care as follows :

" The object of maternity care is to ensure that every expectant and nursing mother maintains good health, learns the art of child care, has a normal delivery, and bears healthy children. Maternity care in the narrower sense consists in the care of the pregnant woman, her safe delivery, her postnatal examination, the care of her newly born infant, and the maintenance of lactation. In the wider sense it begins much earlier in measures aimed to promote the health and well-being of the young people who are potential parents, and to help them to develop the right approach to family life and to the place of the family in the community. It should also include guidance in parent-craft and in problems associated with infertility and family planning."

Premarital Period

Health education should include the teaching of parent-craft. This teaching, known in some countries as family-life education, deals with the physical, mental, and emotional needs of children; the importance of good health in the parents, and of good nutrition in all age-groups; the place and responsibilities of the father in the home; the place of the home in the community; and a knowledge of community health problems and resources. Formal teaching of parent-craft should be preceded by instruction in the home, the parents giving simple and straightforward answers to the young child's questions. The committee points out that in many of the more developed areas no instruction of this kind is given either in the family or in the school.

[1] *World Hlth Org. techn. Rep. Ser.* 1952, 51

The teaching of parent-craft will be ineffective unless the child has a sound, if simple, knowledge of human physiology, including the physiology of sex. Such instruction should be given in school before puberty, and schools should also provide opportunities for free consultations with a medical adviser. Still more detailed teaching and counselling should be given to young people about to marry, in order to aid them to understand the emotional and physical relationships which exist between husband and wife and between them and their children.

Because the educational period has been prolonged in many countries, young people are economically dependent on their parents at a time when they would naturally wish to assume the responsibility of earning their own income and attaining independence. Marriage is often postponed until the age of 25. The committee calls attention to the serious repercussions which this can have on maternity care, since the risks of child-bearing increase substantially after the age of 25 and become still further accentuated beyond the age of 30. The committee is of the opinion that an effort should be made to reduce the economic drawbacks associated with the marriage of young adults, either by the provision of family allowances, or by the adjustment of taxes.

Prenatal Care

Prenatal care presents an unusual opportunity to apply public-health practices and the principles of health education. The committee recommends the following optimum standards :

> " The mother whose pregnancy is proceeding normally should be examined monthly from her first attendance until the 28th week, every two weeks between the 28th week and the 36th week, and weekly thereafter. On her first attendance a history will be taken and the family situation discussed. A general physical examination will be performed as well as a more detailed abdominal and pelvic examination. The urine will be tested, and the blood pressure taken, and the weight recorded at each visit. The examination of the blood will include an estimation of the haemoglobin level and a serological test for syphilis... Care of the teeth should be included in prenatal supervision."

The committee compares the ease with which many women in economically underdeveloped countries give birth to children and the difficulties which women in more-developed countries sometimes experience. This complication is very often due to psychological factors. The hospital environment, which deprives these women of the moral support received when delivered in their own homes, is also sometimes the cause of a long delivery. In view of these factors, the committee suggests that instruction in relaxation and prenatal exercises should be encouraged. In addition, it endorses the recommendation of the Expert Committee on Mental Health that both father and mother should be given information on : the physiology of gestation and childbirth; body changes and changes of mood; sexual

relationships during pregnancy; the purpose of examination procedures; preparation for labour; and the care, both physical and psychological, of the infant.

In certain areas nutritional anaemia and other dietary deficiencies account for a very large proportion of maternal deaths and morbidity, and also contribute to faulty lactation. In addition to food priorities for expectant and nursing mothers, if possible, a food advice bureau should be established in each prenatal clinic, where instructions and demonstrations could be given.

Labour and Delivery Period

The economically less-developed areas have been investing capital in institutions or maternity hospitals at the expense of improved domiciliary care. On the other hand, in some more-economically-developed countries an emphasis is at present being placed on home delivery. While the committee is unanimous in the opinion that all abnormal cases should be delivered in a hospital, it feels that the problem of whether hospital or domiciliary delivery should be encouraged for normal cases has still to be solved. Given favourable circumstances, home delivery offers a high degree of safety and presents several advantages from an emotional and psychological point of view. The safety of home deliveries depends upon the suitability of the home situation, the availability of a mobile unit (emergency " flying squad "), and the access to hospital facilities.

Postnatal Care

In no circumstances should postnatal care be entrusted to unskilled personnel; and, if any complications should occur, a qualified obstetrician should be called. The mother should receive her first postnatal examination during the second week, and her second some time between the fourth and sixth weeks after delivery. When an adequate number of beds is available, the duration of hospital stay should be approximately ten days.

In some countries the new-born infant is often separated from the mother. This practice has recently been reconsidered, and every encouragement is now being given to keeping the infant close to the mother during the stay in the hospital, the baby's bassinet being at the mother's bedside. However, in planning maternity hospitals, provision must be made for small nurseries for the baby whose mother is ill, or for the baby who is restless at night.

CONTROL OF DRUG ADDICTION

At its second session the Expert Committee on Drugs Liable to Produce Addiction established certain basic definitions at the request of the Commission on Narcotic Drugs of the United Nations Economic and Social Council.[1] These definitions are further clarified in the third report of the committee, which will be published on 15 May 1952 as No. 57 of the *World Health Organization : Technical Report Series.*[2]

Definitions

In attempting to clarify the distinction between addiction-producing drugs and habit-forming drugs, the committee delineates the following groups :

1. There are some drugs, notably morphine and morphine-like substances, whose specific pharmacological action will always produce compulsive craving, dependence, and addiction in any individual. Addiction will develop sooner in those individuals whose psychological make-up leads them to seek escape in the pharmacological action of drugs. However, with these drugs the pharmacological action is paramount and the psychological make-up adjuvant. These drugs must be rigidly controlled.

2. Other drugs never produce compulsive craving, yet their pharmacological action is found desirable by some individuals and may readily form a habit of administration—an habituation. Administration of these drugs can be interrupted without significant disturbances. Because with them the psychological make-up is paramount and the pharmacological action adjuvant, these drugs cause no sociological damage and do not need rigid control.

3. The third group comprises drugs whose pharmacological action is intermediate in kind and degree between the other two groups. With these substances psychological make-up is the determining factor, but pharmacological action plays a significant role. In some instances individual and sociological damage may develop; but, since the incidence of damage is not general, the type and degree of control of drugs of this group are better left to national consideration.

The committee points out that only the expressions " drug addiction " and " addiction-producing drugs " should be used in documentation with respect to substances brought under, or to be brought under, international control.

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[1] *World Hlth Org. techn. Rep. Ser.* 1950, 21, 6; see also *Chron. World Hlth Org.* 1950, 4, 76.

[2] *World Hlth Org. techn. Rep. Ser.* 1952, 57, 14 pages, price : 9d., $0.10, Sw. fr. 0.40, or Fr. fr. 30.—

Requests Submitted by Governments

Ipecopan

The committee, in noting a new request from the Swiss Government concerning Ipecopan malted tablets, Ipecopan solution, Ipecopan malted syrup, Ipesandrine sugar-coated tablets, Ipesandrine solution, and Ipesandrine syrup, recommends that these preparations, containing less than 0.2% anhydrous morphine compounded with other medicaments, be exempted from the provisions of the 1925 Convention.

Morpholinylethylmorphine

New information on the addiction liability of morpholinylethylmorphine and its convertibility into an addiction-producing drug led the committee to re-examine the French Government's request concerning the classification of this substance. As this information shows that morpholinylethylmorphine is not more liable than codeine to produce addiction and is less readily convertible to an addiction-producing drug than codeine, the committee considers that it is assimilable to the drugs mentioned in Group II of Article 1 of the 1931 Convention, i.e., the so-called codeine group, which is subject to less severe control than other ethers of morphine.

Addiction-producing Drugs

Morphine derivatives

The committee reiterates its opinion, expressed in previous reports, regarding the gravity of the diacetylmorphine situation, and considers that the complete abolition of legally produced diacetylmorphine in the world would facilitate the struggle against illicit use of this substance. In reference to the request for information circulated to governments by the Director-General of WHO, the report states that there are 50 Member States who have discontinued, or are willing to discontinue, the medical use of this drug. Further steps will be taken in this matter.

The antagonistic action of *N*-allylnormorphine to the analgesic, respiratory, and other effects of morphine indicates the possibility of its clinical use to counteract overdosage of morphine or morphine-like substances and its employment in obstetrics against foetal respiratory depression, which may occur after administration of these drugs. Liability to its use by addicted and previously addicted individuals is very slight.

Synthetic substances

The committee recommends that the following substances and their salts should fall under the regime laid down in the 1931 Convention for drugs specified in Article 1, paragraph 2, Group I : 3-hydroxy-*N*-methylmorphinan (known also under the proprietary name Dromoran), 3-methoxy-

N-methylmorphinan, β-1-methyl-3-ethyl-4-phenyl-4-propionoxypiperidine. The salts of various other synthetic derivatives of the pethidine and methadone types, which were characterized in an earlier session as addiction producing, should also fall under the same regime.

Sharp differences in the intensity and duration of the action of methadols and acetylmethadols (derived from methadone and its isomers) are noted, particularly with respect to oral and parenteral administration. As some of these drugs are liable to produce addiction, and as they are very similar in structure and action, all methadols and acetylmethadols must probably be considered as drugs liable to produce addiction.

Barbiturates

After carefully considering the situation with regard to the use and abuse of barbiturates throughout the world, the committee expresses the opinion that measures should be taken, at a national level, to strengthen control over these substances. Such measures might include (1) dispensing them only on prescription, (2) specifying the number of times the prescription may be refilled or repeated, and (3) keeping a careful record of each prescription.

Amphetamine and its derivatives

Attention is called to the common use, by addicts, of amphetamine and its methyl derivative when morphine or morphine-like substances are not available. Close watch should be kept on the use of these drugs so that appropriate measures for their control may be taken if this should become necessary.

Cannabis sativa L.

With regard to cannabis preparations, the committee expresses the opinion that they are practically obsolete, there being, so far as it can see, no justifiable medical use for them.

ALCOHOLISM

Specific and practical aspects of the problem of alcoholism were examined by the Alcoholism Subcommittee of the Expert Committee on Mental Health when it met for its second session in Copenhagen in December 1951. The report on this subcommittee's discussions and recommendations will be available soon as No. 48 in the *World Health Organization : Technical Report Series.*[1]

[1] *World Hlth Org. techn. Rep. Ser.* 1952, 48

The subcommittee emphasizes that, although the importance of protective measures should not be underestimated, " progress in the various phases of the problem of alcoholism is most feasible only after the large number of alcoholics throughout the world has been considerably diminished through a large-scale rehabilitation effort ". It also points out the importance of publicity measures in the treatment of alcoholism; once the public understands the disease nature of alcoholism, a much greater acceptance of preventive measures may be expected.

Definition and Classification

The subcommittee defines " excessive drinking " as : " any form of drinking which in its extent goes beyond the traditional and customary ' dietary ' use, or the ordinary compliance with the social drinking customs of the whole community concerned, irrespective of the etiological factors leading to such behaviour and irrespective also of the extent to which such etiological factors are dependent upon heredity, constitution, or acquired physiopathological and metabolic influences ". Alcoholics are then " those excessive drinkers whose dependence upon alcohol has attained such a degree that it shows a noticeable mental disturbance or an interference with their bodily and mental health, their interpersonal relations, and their smooth social and economic functioning; or who show the prodromal signs of such developments. They therefore require treatment."

The existence of many different classifications of alcoholics is one of the reasons which prompts the subcommittee to suggest a classification of cases by broad groups into which there will be no difficulty in fitting the many subdivisions of other existing classifications. Most of these classifications have failed to achieve general agreement, either because they are entirely descriptive or, on the other hand, because they presuppose views on the etiology of the different types which are not shared by more than a minority of students of alcoholism. Furthermore, many of the headings proposed in existing classifications are based on the study of a patient at a particular moment in the course of the development of his disorder. Such a classification inevitably means that the same patient may well be placed under different headings of the classification at different periods of his disorder.

The subcommittee's classification, which follows, attempts " on the one hand to avoid begging etiological questions and on the other to avoid becoming involved in detailed discrimination on a symptomatic basis " :

(1) Irregular excessive symptomatic drinkers
(2) Habitual excessive symptomatic drinkers } Alcoholics
(3) Addictive drinkers }

The two latter groups comprise the alcoholics proper.

A note, prepared by Dr. E. M. Jellinek, entitled " The phases of alcohol addiction in males " (given in an annex to the report) greatly contributes to the clarification of the developmental process of alcoholism. It is based on a rigorous statistical analysis of the drinking habits of over 2,000 male alcohol addicts, and depicts the course of alcohol addiction, which is one form, the most extreme form, of alcoholism. The process of development begins with a stage which can be designated as " symptomatic drinking ". All forms of excessive drinking begin with a symptomatic stage, and under certain conditions this stage may be extremely prolonged and may not develop further. If, in the course of time, dependence upon alcohol develops to the degree described in the subcommittee's definition of an alcoholic, one may speak either of habitual symptomatic drinkers or of symptomatic drinkers with addiction. A close study of the developments described in Dr. Jellinek's note will show that each of the three categories proposed in the subcommittee's classification may be formulated with such definitiveness " that surveys and experiments may be carried out on well-defined alcoholic populations ".

Treatment Facilities

The subcommittee suggests that public care of alcoholics proceed at four levels, determined by the phase to which the alcoholic process has progressed and the degree of psychiatric involvements :

(1) early alcoholism, and alcoholism without gross neurotic origins;

(2) alcoholism at the middle stages of the process, and alcoholism with primary neurotic characteristics;

(3) alcoholism in the chronic stage, and alcoholism with psychotic involvements;

(4) alcoholism with apparently irreversible deterioration.

Outpatient clinics

The treatment of early alcoholism and alcoholism without serious psychiatric involvement requires an outpatient clinic attached to a general hospital rather than to a mental hospital. Alcoholics in the early phases of the disease, and alcoholics without serious neurotic encumbrances, are unwilling to go as outpatients to mental institutions in countries where this involves a certain stigma of mental abnormality. As the outpatient clinic of the general hospital should deal with the early and uncomplicated cases only—constituting the majority of the alcoholic population—the psychotherapeutic requirements of such a clinic may be minimal. Supportive psychotherapy is sufficient to set up and reinforce the motivation of the alcoholic to stop drinking. " This involves the restitution of self-respect and self-confidence, a diminishing of the guilt feeling which arises out of drinking behaviour, and a briefing of the alcoholic on the mode of life which

will make it possible for him to carry on without alcoholic anaesthesia. It also requires a full understanding on the part of the patient that no form of drinking is possible for him without relapsing into gross alcoholism."

In view of the large proportion of alcoholics who can be treated at this level, the necessity for hospital beds and special inpatient facilities for the treatment of chronic alcoholism has been overemphasized. It is unwise to organize the treatment of a large number of alcoholics around an inpatient set-up, although it is desirable to have such facilities available for the occasional cases of acute alcoholism, or alcoholic psychosis. From the patient's standpoint, the emphasis in an outpatient clinic is laid on the medical aspects of the problem, which is as it should be.

Facilities at the second level of treatment

At this level intensive psychotherapy is required. If the alcoholic whose drinking behaviour originates in gross neurosis is to be helped successfully to live without alcohol, it is necessary to give him insight into the conflicts which he is trying to solve through the use of alcohol, and to bring about an emotional readjustment which obviates the use of artificial means. In theory, the care of alcoholics at this level is feasible in any community which has a psychiatric or psychoanalytic outpatient department or a mental hygiene clinic. In practice, however, these facilities are rarely available to alcoholics because of the resistance of the clinic staff to their admission. It has been seen that staff do not wish to open the service to alcoholics because they fear a great influx of patients.

It may be desirable to merge treatment of alcoholics at the first two levels into one clinic, rather than try to persuade psychiatric and mental health clinics to extend their services to alcoholics. If this is done, the outpatient clinic's staff will have to consist of one half-time psychiatrist, one full-time assistant psychiatrist, one half-time internist, two full-time social workers, and one full-time secretary. A clinic of this type should be able to deal with 350 to 400 alcoholics per year.

Treatment at the third and fourth levels

At these levels intramural treatment such as is available in public mental hospitals is necessary. In many countries mental hospitals admit alcoholics only when diagnosable psychosis is present. The subcommittee recommends that, through amendment of the admission laws, the facilities of such hospitals be extended to alcoholics without psychosis who fall into the categories described at the levels three and four. It is also desirable that contact and co-operation be maintained between clinics and hospitals at the various treatment levels.

At the fourth level, only custodial care seems to be feasible, yet the degree of deterioration may sometimes be misjudged, and measures must

be taken to ensure periodic revision of the diagnosis. If such a course is indicated, the patient in custodial care may be referred to active therapy.

Disulfiram [2]

The administration of disulfiram is but one of the many aids in the treatment of alcoholics. Although it is not in itself a cure, its value in certain well-selected cases is such that the subcommittee decided to discuss its use in detail. The failures which have occurred are due to its administration to patients who were unsuitable for its application and were forced to submit to it. In general, the first essential in choosing patients for this treatment must be their sincere desire for help and a recognition of their inability to control their drinking.

There are some contra-indications to the use of disulfiram, based on the patient's physical condition. The drug must never be employed in persons with hepatic or circulatory disorders. It may also be contra-indicated in persons with diabetic or renal disorders, although the subcommittee recommends that further study of this question should be undertaken.

Most patients who come for treatment voluntarily and are neither psychopathic personalities nor feeble-minded should receive disulfiram treatment in an outpatient clinic where large-scale rehabilitation work with alcoholics is carried out. An outpatient dispensary service situated in a well-equipped general hospital or working as an independent institution would be best suited for this purpose. Before treatment is started, it is necessary to make a full physical examination, including an analysis of the urine, an electrocardiogram, and a blood sedimentation-rate. If the patient is in a bad general condition or seriously intoxicated, he should be admitted to the hospital, where his condition should improve sufficiently within a week to allow the administration of disulfiram to begin. Two tablets (0.5 g each) should be given on the evening of the first day and one tablet on each of the following five to six days. At the end of a week's treatment, the patient's condition should be re-examined; if it proves satisfactory, he may then receive a maintenance dose of half a tablet every day.

The subcommittee recommends that an alcohol test be made during treatment in all cases unless the physician is sufficiently confident that the patient is fully co-operative and most unlikely to try the effect of drinking. If the test is not performed, it is essential to warn the patient of the grave risk which will result from taking alcoholic beverages. When the test is undertaken, it should be remembered that it provides the opportunity for powerful suggestion, and must be carried out in such a way as to increase this effect. The heavy drinker will be impressed to find that the apparently trivial amount of three teaspoonfuls of whisky or a third of a bottle of beer can produce an obvious, disturbing reaction.

[2] Disulfiram is the non-proprietary name for tetraethylthiuram disulfide; most common proprietary names are Antabuse, Aversol, Abstinyl, and Refusal.

During the first three to four weeks of disulfiram treatment, the patient should receive psychotherapy combined with " social therapy ", that is, skilled assistance from a trained social worker. For cases requiring intensive psychotherapy, the possibility of psycho-analytically based group therapy should be considered. " The experimental use of group therapy of this type for alcoholics has proved promising, and should this promise be fulfilled it will obviously be of great value in overcoming the difficulty of providing intensive individual psychotherapy on the scale necessary for a large-scale programme for the early treatment of alcoholism."

INTERNATIONAL PHARMACOPOEIA

Volume I of the *Pharmacopoea Internationalis* (Ph. I.) was published in October 1951, both English and French editions being available simultaneously. The Spanish translation is to appear later. Special low rates for bulk orders of the book can be arranged by WHO for countries wishing to adopt the work as their national pharmacopoeia.

The importance of publishing volume II as soon as possible is stressed in the ninth report of the Expert Committee on the International Pharmacopoeia, which will be published, as No. 50 in the *World Health Organization : Technical Report Series* [1] on 1 June 1952. This volume of the Ph.I. would then be available, together with volume I, for adoption by countries which have no national pharmacopoeia, or whose pharmacopoeia is out of date. The preparation of the first edition of volume II is discussed, the report stating that 134 monographs on pharmaceutical preparations and 9 appendices covering analytical methods, etc., have been completed up to the present time.

The Executive Board has approved a resolution inviting the Director-General of WHO to take the steps necessary between the States signatories to the Brussels Agreements of 1906 and 1929 for the unification of pharmacopoeial formulas for potent drugs to terminate these Agreements. The text of a draft Protocol for this purpose is an annex to the report of the Expert Committee on the International Pharmacopoeia.

In earlier sessions of the committee, the question of how far new methods of analysis should be introduced in the Ph.I. had arisen. From the results of experimental work carried out by several members, it can be seen that some of these modern methods require expensive apparatus, not commonly found in pharmacies, such as the spectrophotometer, the fluorometer, and the polarograph. The committee discusses in detail whether these methods

[1] *World Hlth Org. techn. Rep. Ser.* 1952, 50, 33 pages, price : 2/–, $0.25, Sw. fr. 1.–, or Fr. fr. 50.–

should be used more widely for pharmacological purposes. It is noted that in many countries the pharmacist is required by law to control the drug dispensed and that difficulties could therefore arise if expensive instruments were necessary for pharmacological assays. It is nevertheless decided that, while methods employing simpler equipment should be used as far as possible, new methods giving dependable results with a great saving of time ought to be introduced. The Karl Fischer method for the determination of water, and microchemical reactions, including the preparation of derivatives on a micro-scale, are among the new methods to be given priority.

In discussing the problem of the protection of international non-proprietary names, the Subcommittee on Non-Proprietary Names, whose report is contained in an annex to this report of the Expert Committee on the International Pharmacopoeia, suggests that manufacturers seeking new names should approach WHO through their national pharmacopoeia commissions or national health-administrations. The importance of having the names selected on an international level by WHO, in the first instance, is stressed in the report. An appendix contains a list of the Latin, English, and French international non-proprietary names, together with their appropriate chemical names or descriptions, agreed upon at the subcommittee's third session.

Review of WHO Publications

NEW MANUAL ON PLAGUE

A *Manual on plague*, to be published by WHO, is now in the course of preparation. The first chapters of this work have already appeared in the last two numbers of the *Bulletin of the World Health Organization* [1] under the title " Plague Studies ". Succeeding chapters will be published in forthcoming numbers of the *Bulletin*. The task of writing this manual, which purports to represent the sum total of present knowledge of plague, has been entrusted to Dr. R. Pollitzer, an expert of worldwide reputation who collaborated on the two treatises which have been the authority on this subject for the past quarter of a century.

In 1926, *A treatise on pneumonic plague* [2] appeared, under the auspices of the League of Nations. In 1936, Wu Lien-teh, J. W. H. Chun, R. Pollitzer & C. Y. Wu published, at the request of the National Health Administration of China (Weishengshu) a book, in both English and Chinese, entitled

[1] *Bull. World Hlth Org.* 1951, 4, 475; 1952, 5, 73

[2] Wu Lien-teh (1926) *A treatise on pneumonic plague*, Geneva (League of Nations publication C.H. 474)

Plague : a manual for medical and public health workers.[3] This work rapidly became a classic and still remains a valuable working tool. However, it has been out of print for some time and has not been reissued.

Research on the prevention and treatment of plague has made such progress during the past 15 years that a new evaluation has become urgent. A reissue of the 1936 publication would not suffice, particularly since it was especially concerned with plague control in China. Therefore, Dr. Pollitzer, who alone among the authors of the previous volumes has continued his activities in plague control during and since the second World War, is writing the *Manual on plague* from a new approach.

The first chapter of the manual contains a summary of the history of plague epidemics throughout the centuries and a survey of the present world distribution of the endemic. Succeeding instalments deal with the plague bacillus, problems in the immunology and the anatomo- and physiopathology of plague, practical laboratory work, rodents and other hosts of the infection, insect vectors, clinical aspects, and ecological and epidemiological factors. The work will conclude with practical guidance concerning prophylaxis and the management of outbreaks and an account of the international aspects of the problem of plague.

This manual, which it is planned to publish in 1953, will appear in two editions, one in English and the other in French.

[3] Wu Lien-teh, Chun, J. W. H., Pollitzer, R. & Wu, C. Y. (1936) *Plague : a manual for medical and public health workers*, Shanghai

POSTMORTEM DETECTION OF PLAGUE

In territories where plague is prevalent, the delimitation of the endemic zones requires the detection of all cases. However, among populations in too low a state of development to comply with regulations concerning pestilential diseases, especially with a system of notification, it has been necessary to take measures for estimating the plague mortality-rate. Thus in Madagascar, which is continually threatened by outbreaks of pneumonic plague, postmortem investigation to detect plague infection has been found necessary in widespread areas.

In a recent number of the *Bulletin of the World Health Organization*,[1] Dr. G. Girard, Chef du Service de la Peste at the Institut Pasteur, Paris, and former director of the Institut Pasteur at Tananarive, explains the reasons for the systematic tracking-down of plague cases in Madagascar and describes the procedure for postmortem diagnosis.

[1] *Bull. World Hlth Org.* 1952, **5**, 109

The technique of postmortem diagnosis consists of tapping the liver, lungs, and buboes by means of a syringe. The serous fluid thus collected serves, on the one hand, for preparing smears and, on the other, for inoculation, after dilution in normal saline, into guinea-pigs. Microscopic examination of the smears frequently gives an almost unequivocal indication; inoculation should always be carried out, however, since, in addition to providing verification, it permits the discovery of many plague cases which would otherwise have remained undetected.

Thirty years' experience in Madagascar has confirmed the value of this system of investigation, which has been applied to tens of thousands of corpses and has been responsible for the detection of about 85% of the recorded cases of human plague, only 15% being discovered during the course of the disease.

A WORLD REVIEW OF SMALLPOX INCIDENCE

An epidemiological study on the incidence of smallpox throughout the world, prepared by Dr. L. H. Murray, of the International Quarantine Section, WHO, was published in the *Epidemiological and Vital Statistics Report* in late 1951.[1] This study, which covers the period from 1939 to 1950, brings up to date the information presented in two previous reviews.[2]

Endemic foci of smallpox lie mainly, but not exclusively, in Africa, Asia, and South America. Other continents are at risk from these endemic sources, though usually an epidemic results from importation of the infection only where public-health services are inadequate or when adverse internal conditions impede the functioning of the services which do exist.

Africa

Smallpox infection had for some time been on the wane, or even absent, in many countries of Africa during the years preceding the second World War; but numerous outbreaks occurred between 1941 and 1951 : in Algeria (1941-4), Anglo-Egyptian Sudan (1947-8), French Cameroons (1943-4, 1950-1), Egypt (1943-6), Liberia (1944-6), Morocco (1941-7), Northern Rhodesia (1945), Sierra Leone (1944-6), Southern Rhodesia (1947), Tripolitania (1946-9), Tunisia (1946-9), and Uganda (1944). There is a high incidence of smallpox in French West Africa, despite large-scale vaccination; the same is true of the Gold Coast, where variola major is the prevalent infection. In Nigeria, the disease exists in severe endemic form, annual incidence is high, and epidemic outbreaks are common.

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[1] *Epidem. vital Statist. Rep.* 1951, 4, 398

[2] Stowman, K. (1945) *UNRRA epidem. Bull.* 1, 371; Fabre, J. (1948) *Epidem. vital Statist. Rep.* 1, 269

While considerable progress has been realized in recent years in bringing smallpox under control in several territories of Africa—this control being more effective in some areas than in others—it is as yet impossible to limit the spread of each new focus as it appears. In general, the larger seaports are maintained free from smallpox, which aids in preventing exportation of the infection to other continents.

Asia

Asia is still the " main endemic home " of smallpox and the chief source of exportation of the disease to other countries. Endemicity is apparent in Afghanistan, Cambodia, India, Iraq, Pakistan, and Viet Nam. There is a close relationship between the incidence of the disease in India and in Pakistan, though the situation is much more serious in India. Figures 3 and 4 illustrate the number of smallpox cases reported in these countries in 1949-51.

As in Africa, many epidemics of smallpox occurred between 1940 and 1951 in Asia, even in countries which had achieved a large measure of control during the pre-war years. An epidemic in Iraq in 1940-3 spread in 1940 to Lebanon, Palestine, the Hashemite Kingdom of the Jordan, and Syria; another epidemic in Iraq in 1947 again affected Syria, Lebanon, and the Hashemite Kingdom of the Jordan in the following year. Importation from other countries was responsible for outbreaks of smallpox in Ceylon in 1941, 1943, and the succeeding years through 1946, and in Indonesia in 1949-50. Epidemics were reported in the Federation of Malaya

FIG. 3. SMALLPOX CASES REPORTED IN INDIA BY FOUR-WEEK PERIOD, 1949-51

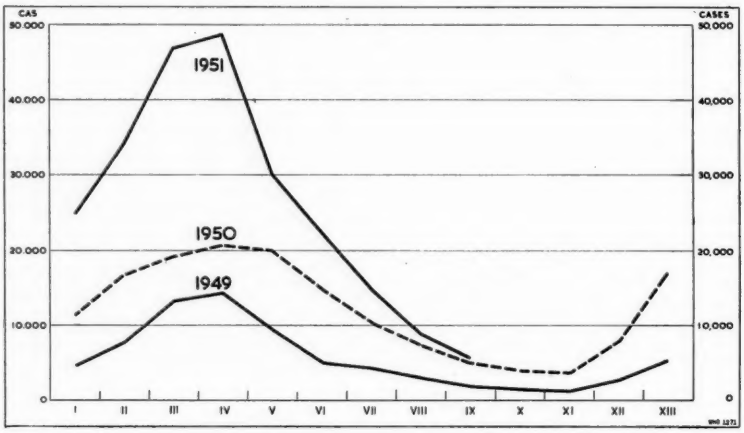
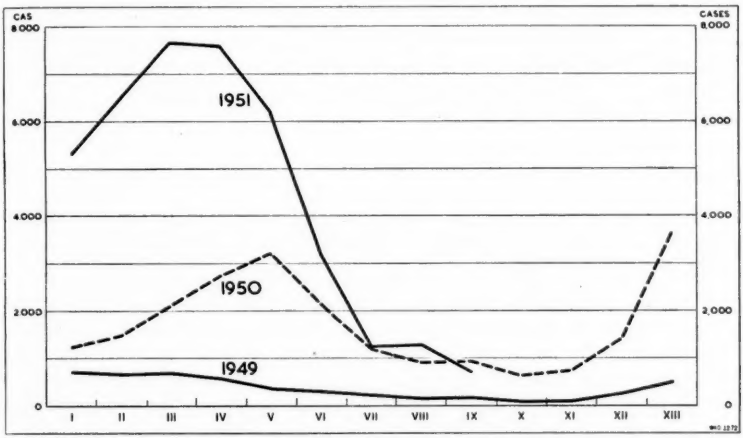


FIG. 4. SMALLPOX CASES REPORTED IN PAKISTAN BY FOUR-WEEK PERIOD, 1949-51



in 1946-7, in Japan in 1945-6, in the Philippines in 1948-9, and in Turkey (the part in Asia) in 1942-5. Saudi Arabia, which is relatively free from smallpox, is endangered yearly during the season of the Mecca Pilgrimage; an outbreak, due to an importation, occurred in 1949 and lasted until April 1950.

A continuously high incidence of smallpox is reported in Burma and Iran.

The State of Israel, despite the public-health problems arising from mass immigration, reported only 14 cases of smallpox in 1949, 11 cases in 1950, and 1 case in the first six months of 1951.

Figures for smallpox incidence in China and Korea are difficult to obtain. It is known, however, that the island of Formosa, after having been free from the disease from 1940 to 1942, suffered an epidemic in 1946-7. In early 1951, extensive epidemics of smallpox and typhus occurred in North Korea; and scattered cases, to the extent of some 100 a week, broke out among the civilian population and the refugees in South Korea.

America

The Americas occupy " a position midway between an endemic home of the disease and a receiving area at risk ". North America, with the exception of Mexico—where a serious endemic form of the disease exists—is relatively free from smallpox. In South America, however, the disease is endemic over a large area, variola minor predominating, particularly in Brazil and Peru.

Smallpox incidence in the USA was higher before the second World War than it was during and since the war. In none of the years between 1944

and 1946 did the total number of cases exceed 400; by 1947, it had dropped to 173 cases, and this decline seems to be continuing. It is interesting to note that with the decline in incidence has come an increase in case fatality-rate : in 1939-40, it was less than 1%; by 1948, it had risen to about 10%. This may probably be explained by the fact that the sporadic and isolated cases which now arise in the USA are of the variola-major type, imported from time to time from abroad.

Europe

Information concerning the incidence of smallpox in Europe is incomplete since reports are no longer available from a number of countries. Generally speaking, Europe may now be regarded primarily as a continent in which the chief threat from smallpox arises from importation from outside countries, all endemic foci having been eliminated except for Portugal.

Variola major was imported into England and Wales in 1946 and 1947 by returning servicemen; but these importations were rapidly controlled; and in the main, cases were limited to direct contacts. The person who imported the smallpox was often well vaccinated himself and possessed a degree of immunity which made his attack of the disease so mild that he failed to seek medical advice; consequently, the disease was recognized as smallpox only when the secondary cases began to appear.

The only significant epidemics in Europe during the last decade occurred in Italy (1944-6) and in Greece (1943-4).

Oceania

Oceania (comprising Australia, New Zealand, New Guinea, and the South Pacific islands) is pre-eminently the continent at risk from smallpox. No endemic foci exist within its boundaries, and no outbreaks have been reported during the last ten years.

Notes and News

Nursing

Working conference on nursing education

A WHO working conference on nursing education opened in Geneva on 24 March and will continue until 5 April. This conference, which has as its theme " Nursing education in the light of changing health and medical care programmes ", has brought together nursing educators from nine countries—Brazil, Canada, Finland, France, India, Switzerland, the United Kingdom, the USA, and Yugoslavia.

Preliminary plans for the conference were made by Miss Kathleen M. Leahy, special short-term nursing consultant. Miss Leahy is Director of the Public Health Nursing Programme of Studies at the University of Washington School of Nursing, Seattle, Washington, USA.

In addition to nursing educators, participants include Mr. S. W. Barnes, House Governor, King's College Hospital, London; Miss Cora Du Bois, Social Science Consultant, Institute of International Education, Washington, D.C.; and Professor W. C. Ryan, Emeritus Professor of Education, University of North Carolina, Chapel Hill, N.C., USA.

Nursing education project in Mexico

A six-month training course for nursing instructors was begun in Mexico City on 13 January, with WHO technical assistance. This course, which is giving instruction to 30 trainees, includes theoretical and practical nursing, principles and methods of teaching, sociology, mental health, clinical supervision in nursing, nutrition, and advanced Spanish. Students are to return to their own institutions for the last two months of the training to begin " practice teaching " under the close supervision of the instructors of the course.

Upon completion of the training, five of the most capable of the nurses who have attended will be selected for fellowships to enable them to take more advanced study outside Mexico and to prepare them for teaching special subjects, such as surgical and paediatric nursing.

Tuberculosis

India

Expansion of the BCG-vaccination programme which has been under way in different parts of India since 1949 is being planned. Projects which were originally assisted by the Joint Enterprise are now being aided by WHO and UNICEF, which are providing international personnel to train local teams and the necessary supplies, equipment, and transport. Recently, 38 new vehicles—jeeps and 4-wheel-drive station-wagons—arrived in India, some of which are to be used in tuberculosis-control activities in Madhya Bharat, Punjab, and Uttar Pradesh.

Experience gained in the pilot BCG-vaccination projects of the past few years has demonstrated that a team composed of one doctor and six technicians can cover a population of more than 100,000 per year. About 300 doctors and vaccinators are already engaged in BCG-vaccination activities in India. Cumulative totals for the Indian projects as of the end of January 1952 are : tested, 2,410,629; vaccinated, 730,574.

China

It is reported that vaccination of schoolchildren is almost completed and vaccination of preschool-age children is in progress in the BCG project which began in May 1951 in Formosa. Figures for December were 86,196 tested and 56,102 vaccinated; cumulative totals at the end of January 1952, 722,376 tested and 479,389 vaccinated.

Philippines

Dr. A. Geser, of Denmark, has assumed the post of WHO senior adviser to the Government BCG-vaccination programme in the Philippines. Dr. Geser was Chief of the Joint Enterprise mission to Ceylon and also served with other Joint Enterprise teams in Poland, Lebanon, and Syria.

BCG-vaccination activities are already in progress in the Philippines, having been undertaken by national teams as part of a programme in tuberculosis control. Head of the national operations is Dr. Bona de Santos, who, as a WHO Fellow, recently completed a six-month study of BCG vaccination in Europe.

Consultants on Assignments in Eastern Mediterranean Region

Iran

A survey of the major nutritional problems of Iran is being made by a WHO consultant, Dr. J. C. Thomson, of New York, on leave from the International University of Tokyo. Dr. Thomson, who has had more than 20 years' experience in nutrition in China, is already known in Teheran : last year he lectured at the Medical College of the University of Teheran and, at the same time, worked on a special project, conducted by the Ministry of Health and the Rockefeller Foundation, on nutritional aspects of public health. His present assignment is of two months' duration.

Lebanon

Dr. Edyth Morris, of Johannesburg, South Africa, has gone to Lebanon as leader of a WHO/UNICEF maternal and child health demonstration team. Assisted by public-health nurses and a matching team of national personnel, Dr. Morris will supervise the establishment, in Beirut, of a demonstration and training centre for maternal and child care. The Government of Lebanon is providing building facilities as well as the matching staff and expects to continue the project after international personnel have withdrawn.